

REMARKS

In response to the Office Action mailed July 22, 2011, Applicant amends claims 13, 15, and 17-19 to address the §112 objection. Applicant also amends claim 21 to recite a mobile station that receives a broadcast message that includes an identifier. The identifier can be set to either a first value or a predetermined value. When the identifier is set to the predetermined value, the predetermined value provides a broadcast indication. When the identifier is set to a first value and the first value uniquely identifies a specific mobile station. When the mobile station of claim 21 is the specific mobile station identified by the first value or when the identifier is set to the predetermined value, the broadcast message indicates that the mobile station is to transmit at a data rate that is less than or equal to an autonomous data rate. In view of the above claim amendments and the arguments presented below, Applicant submits that the application is in condition for allowance.

The present application relates to enhanced reverse link scheduling defined in CDMA2000 Standards (Release D). The specification describes two reverse link transmission modes: a scheduled mode and an autonomous mode. A base station can send flags to command a mobile station to switch between these two modes. The specification also discloses a broadcast grant message that can be transmitted to multiple mobile stations to control the mobile stations' reverse link transmission rates, collectively or individually.

Independent claims 1, 20, and 26 recite using a broadcast message to set a particular data rate for a plurality of mobile stations to use in reverse link transmission. It is noted that the particular data rate is an actual data rate for the plurality of mobile stations to use, not an upper limit.

Independent claim 10 recites a broadcast message sent to a plurality of mobile stations that can cause the plurality mobile stations to set respective data rates to a value that is less than or equal to an autonomous data rate of each of the corresponding mobile stations. It is

noted that as recited in claim 10, each mobile station has its corresponding autonomous data rate.

Independent claim 13 recites a broadcast grant message that are sent to a plurality of mobile stations. The broadcast message includes an identifier which can be set to two values, a first value to uniquely identify one of the mobile stations that is to change data rate for transmission over a reverse wireless link, and a predetermined value to provide a broadcast indication for indicating to the plural mobile stations to change reverse link transmission data rate.

Similar to claim 13, amended Independent claim 21 recites a mobile station that is configured to receive a broadcast message targeted to plural mobile stations. The broadcast message includes an identifier which can be set to two values: a first value to uniquely identify a specific mobile station and a predetermined value to indicate that the plural mobile stations are to change reverse link transmission data rate. When the mobile station in claim 21 is the specific mobile station identified by the first value or when the identifier is set to the predetermined value, upon receiving the broadcast message, the mobile station is to transmit at a data rate that is less than or equal to an autonomous data rate.

The examiner rejected independent claims 1, 20, and 26 as being anticipated by Chen (2002/0151290 A1, Qualcomm, hereafter "Chen") and rejected independent claims 10, 13, and 21 as being obvious under Chen and Chen et al. (U.S. Pat. 7,155,236, hereafter "Chen et al.")

The claim rejections are respectfully traversed.

Claims 1, 20, and 26

The first reference, Chen, discloses generally using a grant message to notify each mobile station of a reverse link data rate and a broadcast message to indicate the maximum data rate to every mobile station. The second reference, Chen et al., describes an individual grant message that sets a data rate for each individual mobile station and is sent via an

individual grant channel. The second reference, Chen et al., also describes a common grant message that is transmitted over a common grant channel shared by multiple mobile stations in an autonomous mode and that specifies a maximum Traffic-to-Pilot ratio to which the multiple mobile stations must adhere.

In both references, a broadcast message is disclosed as being transmitted on a common channel shared by multiple mobile stations. However, the broadcast message in both references includes only a maximum data rate that sets an upper limit on the actual data rate to be used by the multiple mobile stations, unlike claims 1, 20, and 26, which requires a broadcast message that are sent to a group of mobile stations and that specifies a particular data rate to be used by all the mobile stations.

The two references, Chen and Chen et al., alone or in combination, do not disclose a broadcast message that specifies a particular data rate to be used by all the mobile stations in that group over the reverse link transmission, a claim limitation included in claims 1, 20, and 26. Chen discloses a broadcast message and Chen et al. discloses a common grant message. Both messages are directed to multiple mobile stations, but only specify a maximum data rate that functions as an upper limit on the transmission rate of each mobile station. Neither of these two messages specifies a particular data rate that becomes the transmission data rate for all the mobile stations in the group. As such, claims 1, 20, and 26 cannot be anticipated by Chen or Chen et al, contrary to the examiner's assertion.

Claims 13 and 21

As recited in claims 13 and 21, a broadcast message is transmitted to multiple mobile stations. The broadcast message includes an identifier that can be set to a first value or a predetermined value. The broadcast message is targeted to the multiple mobile stations when the identifier is set to the predetermined value. The broadcast message is targeted to a specific

mobile station when the identifier in the broadcast message is set to the first value that uniquely identifier one of the mobile stations.

The two references, Chen and Chen et al., disclose two messages: an individual grant message and a common grant message. The individual grant message is transmitted to and targeted to an individual mobile station. The common grant message is transmitted and targeted to a group of mobile stations. The two references do not disclose a broadcast message that includes an identifier which can be set to a first value or a predetermined value. When the identifier is set to a first value, the identifier uniquely identifies one of the mobile stations and the broadcast message is targeted to that mobile station even through the broadcast message is transmitted to a group of mobile stations. When the identifier is set to a predetermined value that provides a broadcast indication, the broadcast message is transmitted and targeted to a group of mobile stations.

Because neither Chen nor Chen et al. teaches or suggests including an identifier in the broadcast message that can be used to either uniquely identify the mobile station or provide a broadcast indication, a claim limitation required by claims 13 and 21, claims 13 and 21 are patentable under 35 U.S.C. 103(a) over Chen in view of Chen et al.

Claim 10

Claim 10 is patentable under 35 U.S.C. 103(a) over Chen in view of Chen et al. The examiner acknowledges that Chen does not disclose an autonomous mode but cites Chen et al. for disclosing such feature. Chen et al. discloses an autonomous mode that has a maximum Traffic to Pilot ratio common to all mobile stations. That is, Chen et al. uses a common grant message to specify a data rate as an upper limit to which each of the plurality of mobile stations must adhere. Chen et al., col. 13, lines 62-67.

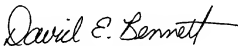
In contrast, claim 10 recites a broadcast message that is sent to a plurality of mobile stations and directs each mobile station to transmit below or equal to an autonomous data rate

of each of the corresponding mobile stations. In claim 10, each mobile station has its corresponding autonomous data rate, which differs from Chen et al.'s maximum Traffic to Pilot ratio that is common to all mobile stations. As such, neither Chen nor Chen et al., alone or in combination, teaches or suggests the broadcast message as recited in claim 10, which is sent to a plurality of mobile stations and causes the plurality of mobile stations to set respective data rates to a value less than or equal to an autonomous data rate of each of the corresponding mobile station. Chen or Chen et al cannot render claim 10 obvious.

Conclusion

Applicant submits that all claims are in condition for allowance. Reconsideration is respectfully requested.

Respectfully submitted,
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